

REMARKS

This response is submitted in reply to the Final Office Action dated March 22, 2005. Claims 1-2, 5-15 and 17 are pending in the application. Claims 1-2, 5-15 and 17 have been amended. No new matter has been added by any of the amendments made herein. A Request for Continued Examination (RCE) is submitted with this Response.

Applicants respectfully submit that at least for the reasons set forth below, the rejections have been overcome or are improper. Accordingly, Applicants respectfully request reconsideration of the patentability of claims 1-2, 5-15 and 17.

Claim 1 was objected to based on informalities. Applicants have amended claim 1 to correct the informalities. Applicants therefore respectfully request that the rejection of claim 1 be withdrawn.

Claims 14, 15 and 17 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Patent Office states that the element of "allocating a memory space to separate area in the memory" of claim 14 is not disclosed in the specification. Applicants have amended claim 14 to overcome this rejection. Claims 15 and 17 depend from claim 14. Accordingly, Applicants respectfully request that the rejection of claims 14, 15 and 17 be withdrawn.

Claims 1-2, 5-15 and 17 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Patent Office cites several formalities in the claims which require correction and/or clarification. Applicants have amended the claims to further clarify the claims. Applicants therefore respectfully submit that the rejection of claims 1-2, 5-15 and 17 under §112 has been overcome and requests that this rejection be withdrawn.

Claims 1, 2, 7, 11 and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,710,613 to Shigenaga ("*Shigenaga*") in view of U.S. Patent No. 4,849,614 to Watanabe et al. ("*Watanabe*") in view of U.S. Patent No. 5,161,256 to Iijima ("*Iijima*") and in further view of U.S. Patent No. 5,745,571 to Zuk ("*Zuk*"). Applicants respectfully submit that there is no motivation to combine these references to achieve the claimed invention. Nevertheless, even if these references are combined, the combination of

Shigenaga, *Watanabe*, *Iijima* and *Zuk* does not disclose, teach or suggest the elements of the claimed invention.

Shigenaga is directed to an identification system for an integrated circuit card or IC card that is used in a card terminal. Specifically, the identification system identifies the validity between a first unit and a second unit when the first unit is in communication with the second unit. (See the Abstract). The system compares the actual processing time versus the estimated processing time required for processing the identification code information in the second unit to determine whether the IC card and/or the card terminal is authorized or not. (Col. 1, lines 5-10). *Shigenaga* does not disclose or suggest that the IC card can be used for a plurality of business organizations or enterprises.

Iijima is directed to a method and system for allocating a file area in a memory area of an IC card or smart card. Specifically, *Iijima* is directed to a data memory in an IC card that includes a common data file used commonly in all applications and a plurality of application data files independently used for each application. The IC card described by *Iijima* is directed to an IC card which is issued by a single business organization to a user.

Zuk is directed to a cryptographic communications method and system and more specifically, to a method and system for ensuring secure communications between a smart card and a terminal or between two terminals. (Col. 1, lines 6-25). The data communicated between the smart card and terminal are encrypted and decrypted to securely transfer the data. Therefore, *Zuk* is directed to a method or system where the encrypted information or data is transferred to and from an IC card issued by a single business organization. *Zuk* does not disclose or suggest a plurality of business organizations accessing one IC card.

Accordingly, neither *Shigenaga*, *Iijima* nor *Zuk*, whether taken alone or in combination, disclose, teach or suggest providing a plurality of business organizations access to a single IC card, smart card or similar card.

On the contrary, *Watanabe* describes a composite IC card for controlling information of a plurality of different enterprises where a memory is divided into a plurality of storage areas and where a code store section stores a plurality of codes necessary to access the storage areas of the card. (See the Abstract). The composite IC card, therefore, enables a plurality of business organizations to access information on the card. As described above, neither *Shigenaga*, *Iijima*

or *Zuk* disclose, teach or suggest an IC card such as a composite IC card which enables a plurality of business organizations to access the card. Therefore, a person of ordinary skill in the art would not be motivated to combine *Shigenaga*, *Iijima* and *Zuk* with *Watanabe*, where there is no motivation, teaching or suggestion in the references to make such a combination.

Moreover, *Watanabe* states that one problem with conventional IC cards is that a different IC card has to be issued by each business organization to an individual to enable the individual to use the card for that business organization. (Col. 1, lines 52-61). *Watanabe* further states that having so many cards is an inconvenience to a user. As a result, *Watanabe* states that its composite IC card is an improvement over the conventional IC cards. Thus, *Watanabe teaches away* from a single function IC card separately issued by each business organization of a plurality of business organizations as described in *Shigenaga*, *Iijima* and *Zuk*.

For at least these reasons, a person of ordinary skill in the art would not be motivated to combine *Shigenaga*, *Iijima*, *Watanabe* and *Zuk* to achieve the claimed invention, where *Watanabe* teaches away from the combination and where there is no motivation or suggestion in any of the references to make such a combination.

Nevertheless, even if these references are combined, the combination of *Shigenaga*, *Watanabe*, *Iijima* and *Zuk* does not disclose, teach or suggest the elements of the claimed invention.

Amended claim 1 is directed to an information processing system with a portable electronic device including means for processing information and a memory employed by a plurality of business organizations. The system includes an access apparatus possessed by each of the plurality of business organizations for accessing the portable electronic device. The access apparatus includes means for executing and authentication between each business organization and the portable electronic device by using the access key information and means for transmitting the file registry information to the portable electronic device. The system also includes a management sector having means for generating the file registry information and the access key information based on file key information that issue a key information process by the management sector. The management sector is adapted to create the file registry information by securing memory space in the portable electronic device where the memory space includes memory space specifying information. The management sector further is adapted to create the

file key information by encrypting the memory space specifying information in the file key information with the issuer key information where the file key information is assigned to each of the plurality of business or organizations. Applicants respectfully submit that the combination of *Shigenaga*, *Watanabe*, *Iijima* and *Zuk* does not disclose teach or suggest these elements.

The Patent Office states that *Shigenaga* discloses all of the elements of the claimed invention except for an “accessing area . . . corresponding to the file key information using the first access key information.” (See the Final Office Action, page 6). The Patent Office therefore relies on *Watanabe* to remedy this deficiency of *Shigenaga*.

As described above, *Watanabe* is directed to a composite IC card which controls information of a plurality of different enterprises using the IC card in which a memory is divided into a plurality of storage areas and which has a code storage section for storing a plurality of codes necessary to access the storage areas. (See the Abstract). As stated by the Patent Office, *Watanabe* also describes allowing common information to be accessed by any enterprise and individual information to be accessed only by certain enterprises. (Col. 2, lines 11-14). However, as the Patent Office states, *Shigenaga* lacks specifically allocating a memory space to a separate area in the memory by decrypting a file registry information to generate memory space specifying information for specifying the space to be dedicated to the memory space, and file key information. (See the Final Office Action, page 7). The Patent Office therefore relies on *Iijima* to remedy the deficiency of the combination of *Shigenaga* and *Watanabe*.

As described above, *Iijima* is directed to a method and system for allocating a file area in the memory area of an IC card. *Iijima*, however, does not disclose, teach or suggest securing memory space in a portable electronic device where the memory space includes memory space specifying information that specifies the size of the memory space to be secured in the portable electronic device. As described in *Iijima*, each data file has a predetermined size where if the size of a first data file is too large and cannot be added to a second data file, the first data file “cannot be assigned to the data memory 16.” Therefore, *Iijima* does not disclose, teach or suggest the elements of the claimed invention. Accordingly, Applicants respectfully submit that *Iijima* does not remedy the deficiencies of *Shigenaga* and *Watanabe*.

The Patent Office attempts to remedy the deficiencies of the above combination using *Zuk*. Specifically, the Patent Office states that *Shigenaga* “lacks the decrypting the file registry

information/data file definition command in key file information.” (See the Final Office Action, page 7). Therefore, the Patent Office attempts to use *Zuk* to teach this element. Applicants respectfully submit that *Zuk* does not disclose, teach or suggest encrypting or decrypting file registry information as in the claimed invention.

Zuk is directed to a cryptographic communications method and system that encrypts data on the basis of a random key and transmits the data to a smart card. (See the Abstract). The Patent Office states that *Zuk* teaches that it is known to encrypt data and transfer that data to a card and then decrypt that data and store it in a memory. Applicants respectfully disagree and traverse this rejection and submit that *Zuk* does not disclose, teach or suggest this element.

Zuk generally teaches the encryption and decryption of data to securely transfer the data to and from a smart card. *Zuk* does not disclose, teach or suggest a processing system including a management sector adapted to create a file key information by encrypting the memory space specifying information (i.e., file name and size of a memory space) and the file key information with the issuer key information to assign the file key information to each of a plurality business organizations. In fact, *Zuk* does not disclose, teach or suggest this element or any similar element.

Accordingly, for at these reasons, amended claim 1 and claims 5-6 which depend from amended claim 1, are each patentably distinguished over the combination of *Shigenaga*, *Watanabe*, *Iijima* and *Zuk* and in condition for allowance.

Independent claims 2, 7 and 14 include certain similar elements to amended claim 1. Therefore, amended claims 2, 7 and 14 and claims 8-13 and 15 and 17, which depend from these claims are each patentably distinguished over the combination of *Shigenaga*, *Watanabe*, *Iijima* and *Zuk* and in condition for allowance.

Claims 5, 10 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Shigenaga*, *Watanabe*, *Iijima*, *Zuk* and further in view of “SMuG.0” by Canetti et al. (“*Canetti*”). Claim 5 depends from amended claim 1. Claim 10 depends from amended claim 7 and claim 15 depends from amended claim 14. Therefore, claims 5, 10 and 15 are allowable for at least the reasons set forth above with respect to amended claims 1, 7 and 14 because the combination of *Shigenaga*, *Watanabe*, *Iijima* and *Zuk* and *Canetti* does not disclose, teach or suggest the novel

elements of claims 5, 10 and 15 in combination of the novel elements of amended claims 1, 7 and 14, respectively.


Claims 12-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Shigenaga, Watanabe, Iijima, Zuk* and in further view of U.S. Patent No. 5,991,749 to Morrill Jr. ("Morrill"). Claims 12 and 13 depend from amended claim 7. Therefore, claims 12 and 13 are allowable for at least the reasons set forth above with respect to amended claim 7 because the combination of *Shigenaga, Watanabe, Iijima, Zuk* and *Morrill* do not disclose, teach or suggest the novel elements of claims 12 and 13 in combination of with the novel elements of amended claim 7.

In light of the above, Applicants respectfully submit that claims 1-2, 5-15 and 17, are patentable over the art of record because the cited references, whether taken along or in combination, do not disclose, teach or suggest all of the elements of these claims. Accordingly, Applicants respectfully request that claims 1-2, 5-15 and 17 be deemed allowable at this time and that a timely notice of allowance be issued in this case.

A check in the amount of \$790.00 is submitted herewith to cover the fee for the RCE. If any other fees are due in connection with this application as a whole, the Patent Office is authorized to deduct the fees from Deposit Account No. 02-1818. If such as withdrawal is made, please indicate the Attorney Docket No. (112857-228) on the account statement.

Respectfully submitted,

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Dated: June 22, 2005